

ABSTRACT OF THE DISCLOSURE

[0091] An error signal detection method and apparatus for an optical recording/reproducing system. The error signal detection method includes: (a) detecting light incident through an objective lens after having been reflected and diffracted from a recording medium, as eight light portions arranged in a 2x 4 matrix, including four inner light portions, and four outer light portions around the corresponding inner light portions, wherein the rows and columns of the matrix are parallel to the tangential and radial direction of the recording medium, respectively; (b) calculating a first sum signal by summing a detection signal from at least one outer light portion located in a first diagonal direction, and a detection signal from an inner light portion located in a second diagonal direction; (c) calculating second sum signal by summing a detection signal from an inner light portion located in the first diagonal direction, and a detection signal from an outer light portion located in the second diagonal direction; and (d) comparing phases of the first and second sum signals and outputting a phase comparison signal, wherein a tilt error signal is detected from the phase comparison signal. The tilt error signal detected using the method by the error signal detection apparatus has a high signal-to-noise ratio, and is less affected by detracking.